

CLAIM AMENDMENTS

1 1 through 7 (canceled)

1 8. (new) A method of diagnosing a colorectal carcinoma
2 in a patient suspected of suffering from colorectal cancer, which
3 comprises the steps of:

4 (a) obtaining from the patient a biopsy of colorectal
5 tissue, lymph nodes or a sample of body fluid or stool, wherein the
6 colorectal tissue, lymph nodes, body fluid, or stool are free of
7 HERG channels in a patient free of colorectal cancer;

8 (b) detecting as a selective tumor marker the presence of
9 at least one HERG potassium channel in the biopsy of colorectal
10 tissue, lymph nodes, or in the body fluid or stool; and

11 (c) relating the presence of HERG potassium channel in
12 the biopsy or sample to colorectal carcinoma in the patient.

1 9. (New) The method of diagnosing colorectal carcinoma
2 in a patient defined in claim 8, wherein according to step (b) the
3 selective tumor marker is detected by either reverse
4 transcriptase/polymerase chain reaction or through formation of a
5 detectable complex formed between the HERG potassium channel and an
6 antibody thereto

1 10. (new) The method of diagnosing colorectal carcinoma
2 in a patient defined in claim 8, wherein according to steps (b) and
3 (c) the presence of HERG potassium channel as a selective tumor
4 marker is detected by isolating cellular RNA from the biopsy,
5 treating the isolated cellular RNA with reverse transcriptase to
6 obtain cDNA, performing reverse transcriptase/polymerase chain
7 reaction analysis on the cloned DNA to amplify the cDNA and to
8 detect in the cDNA, a genetic marker for the HERG potassium
9 channel, and relating the presence of the genetic marker for HERG
10 potassium channel to colorectal carcinoma in the patient.

1 11. (new) The method of detecting colorectal carcinoma in
2 a patient defined in claim 8, wherein according to steps (b) and
3 (c) the presence of HERG potassium channel as a selective tumor
4 marker is detected by staining a section of the biopsy, incubating
5 the section of the biopsy with rabbit anti-ERG1 HERG as a primary
6 HERG antibody, capable of reacting with HERG potassium channel to
7 form a complex, treating the complex with a visual aid to visualize
8 the primary HERG antibody, and detecting a homogeneous brown stain
9 indicating that a reaction occurring between the primary HERG
10 antibody and the HERG potassium channel in the biopsy to form a
11 complex, and relating formation of the complex to colorectal
12 carcinoma in the patient.

1 12. (new) A method of treating colorectal carcinoma in
2 a patient in need of said treatment, which comprises the step of

3 administering to said patient, a therapeutically effective amount
4 of 4-[1-{2-(6-methyl-2-pyridinyl)ethyl-4-
5 piperidinyl}carbonyl]methane-sulfoanilide 2HCl sufficient to treat
6 the colorectal carcinoma.

1 13. (new) The method of treating colorectal carcinoma in
2 a patient as defined in claim 12, wherein prior to treating the
3 patient with a therapeutically effective amount of 4-[1-{2-(6-
4 methyl-2-pyridinyl)ethyl-4-piperidinyl}carbonyl]methane-
5 sulfoanilide 2HCl, the following steps are carried out:

6 (a) obtaining from the patient a biopsy of colorectal
7 tissue, lymph nodes or a sample of body fluid or stool, wherein the
8 colorectal tissue, lymph nodes, body fluid, or stool are free of
9 HERG channels in a patient free of colorectal cancer;

10 (b) detecting as a selective tumor marker the presence of
11 at least one HERG potassium channel in the biopsy of colorectal
12 tissue, lymph nodes, or in the body fluid or stool; and

13 (c) relating the presence of HERG potassium channel in
14 the biopsy or sample to colorectal carcinoma in the patient.